



DoD Use of Commercial Acquisition Practices

—When They Apply and When They Do Not

Frank Kendall



The Department of Defense (DoD) generally buys major weapon systems through the defense acquisition system, a process that is highly tailorable but still built around the assumption that the DoD will compensate suppliers for product development, contract through Defense Federal Acquisition Regulations and be heavily involved in all aspects of the product life cycle. A number of organizations—including the Defense Business Board, some think tanks and some in Congress—have encouraged or recommended greater use of commercial practices. There are indeed times when using more commercial practices makes sense, and we should be alert to those opportunities—in any aspect of defense procurement.

There are three aspects of “going commercial” that I would like to address—first, purchases based on the fact that an item is offered as a commercial product; next, the need to access cutting-edge commercial technologies; and, finally, those cases where we can take advantage of private investments to develop products we might traditionally have purchased through the normal multi-milestone acquisition system.

Our policies and regulations try to strike the right balance between taking the steps needed to protect the taxpayer from overpaying while simultaneously avoiding discouraging commercial firms from doing business with DoD by asking for more information than they are willing to provide. For purely commercial items widely and competitively sold on the open market, this is easy. For thousands of items, from office furniture to cleaning supplies to laptop computers, the DoD pays commercial prices (subject to negotiated adjustments for quantity-based discounts, etc.) without inquiring as to the costs to produce the products. Other items are more clearly and purely military products, such as a replacement part for a howitzer or a low observable fighter component. The gray area between these extremes represents a problem in first determining that a product can be considered commercial, and, then, if there is no compe-

tion for setting the price for that product, obtaining adequate information from the supplier and other sources to determine that the price charged is fair and reasonable. We are working to expedite these processes, make them more predictable, and provide technical support to the procuring officials who must make these difficult determinations. I'm afraid that we will never be perfect at this, given the vast number of items the DoD procures and our limited resources, but we must and will improve our performance while preserving a reasonable balance.

It is clear that in many areas of technology the commercial market place is moving faster than the normal acquisition timeline for complex weapon systems. Examples include information technology, micro-electronics, some sensor technologies, some radio frequency devices and some software products. In most cases, these technologies will enter our weapon systems through one of our more traditional prime contractors. Our prime contractors and even second- and lower-tier suppliers are looking for a competitive advantage, and, when commercial technologies can provide that advantage, they will embed them in their products.

Competition among primes can give us access to current commercial technologies early in a program, but we often move to a sole-source situation when we down-select for Engineering and Manufacturing Development (EMD), reducing the incentives for inserting state-of-the-art commercial technologies. We can sustain these incentives by insisting on modular designs and open systems, both emphasized under the Better Buying Power initiatives. As part of this process, we also must manage intellectual property so we don't experience "vendor lock" in which we cannot compete upgrades without going through the original contractor.

Assistant Secretary of the Air Force (Acquisition) Bill LaPlante's initiative to "own the technical baseline" includes the concept of proactive management of configuration control and of interfaces so that the DoD preserves the option to introduce technology at rates more consistent with the pace of relevant commercial technology improvements.

The DoD also is taking other steps to improve our access to commercial technology. These include opening the Defense Innovation Unit-Experimental (DIU-X), in Silicon Valley, investments through In-Q-Tel and increased emphasis on the productivity of programs like the Small Business Innovative Research program. The DoD also is evaluating the congressionally sponsored Rapid Innovation Fund (RIF) and will make a decision this year as to whether to include a request for funds for a Reduction in Force in the Fiscal Year 2017 President's Budget. All these steps are designed to open the DoD to more timely and broad commercial technology insertion.

The last of the three "going commercial" topics I would like to cover involves situations in which the DoD substitutes a more commercial acquisition model for the ones depicted and described in DoD Instruction (DoDI) 5000.02. In some cases, industry, traditional defense contractors and others will invest to bring a product to the DoD market, without DoD shouldering the direct cost of product development. The critical motivation for these independent businesses decisions is the prospect of reasonable returns on the corporate investment.

Cost Sharing

Sometimes, especially when there is a mixed DoD and commercial market for the product, a cost-sharing arrangement may be appropriate in a public private "partnership" for development. DoD acquisition professionals need to be alert to these opportunities and prepared to analyze them and act on them where they benefit the government. When we do this, we may need to be innovative and think "outside the box" about business arrangements and contract structures. In these cases, the structure and processes in DoDI 5000.02 may be highly tailored or even abandoned. I'll illustrate this concept with a few real-life examples.

As we moved down the path of DoD-funded research and development for tactical radios under the Joint Tactical Radio Systems program, we discovered that in parallel with the DoD-funded programs of record, some companies had invested their own money to develop and test products that used more advanced technologies than the Programs of Record. These essentially commercial product development efforts offered the prospect of cheaper and higher performance systems, without a DoD-funded development program. As a result of this, we changed the acquisition strategy to allow open competitions and stressed "best value" source selections so we could take advantage of the most cost-effective radios available.

Our "system" had a little trouble adjusting its planning to this type of acquisition. The Developmental Testing people wanted to perform a standard series of developmental tests, even though the development was complete. Operational Test people wanted to test each competitor—before source selection. Program oversight people wanted to do Milestone (MS) A and B certifications, even though there was no reason to have an MS A or B.

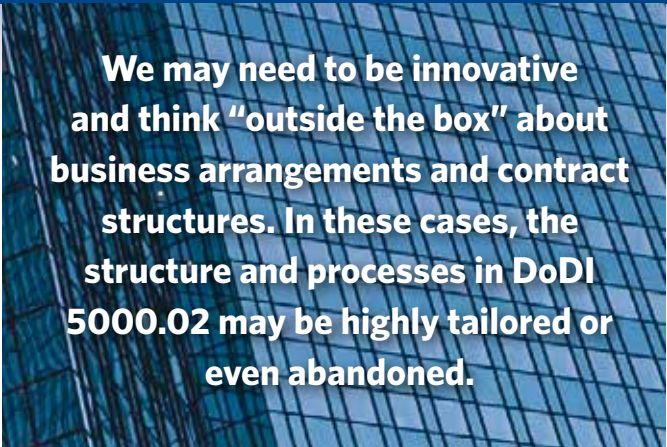
What we needed, and where we ended up, was a competitive source-selection process for production assets that included an assessment of bidder-provided test data, laboratory qualification testing, and structured comparative field testing to verify the offered products met DoD requirements. There were minimum requirements that had to be met; once that was established, a bidder would be in a "best value" evaluation for source selection for production. It was a little surprising to me

how wedded our workforce, in both the Service and the Office of the Secretary of Defense, was to the standard way of doing business—even when it didn't really apply to the situation.

The next example involves space launch. The DoD is working to bring competition into this market. That opportunity exists because multiple firms have been investing development funds in space launch capabilities for both commercial and DoD customers. We acquire space launch as a service; there is no compelling reason for DoD to own launch systems. What we need is highly reliable assured access to space for national security payloads, which can be acquired as a service. For some time, we have been working to certify a commercial launch company to provide national security launches. That milestone recently was achieved for the first “new entrant” into national security launches in many years. The DoD did not fund the development of the new entrant's launch system, but it did provide support through a Cooperative Research and Development Agreement for the certification process.

More recently, the need to remove our space launch dependency on imported Russian rocket engines has caused the DoD to evaluate options for acquiring a new source of reliable competitive launch services. Through market research, we know there are options for private investment in new launch capabilities but that industry's willingness to develop the needed products may depend on some level of DoD funding. The DoD intends to ask for industry bids in a very open-ended framework for whatever financial contribution would be necessary to “close the business case” on the guaranteed provision of future space launch services. This novel acquisition approach will work only if the combined commercial, other government customer, and military launch demand function can provide enough anticipated launch opportunities to justify industry investment. This effort is a work in progress, and we don't know if it will prove successful. If it does succeed, it will provide for the continuing viability of two competitive sources of space launch services—without the need for DoD funding and executing a new standard DoD development program for a launch or propulsion system.

Another example from the space area is the Mobile Ground User Equipment (MGUE) for GPS III. These GPS receiver electronics “chips” will be ubiquitous in DoD equipment and munitions. The technology also will be relevant to commercial GPS receivers that will be embedded in millions of commercial devices. Here, also, the DoD has been proceeding with a standard DoD-funded development program with multiple vendors developing MGUE risk reduction prototypes leading up to an EMD program phase. The combined market for this capability is so great that the competitors proceeded with EMD on their own, without waiting for a DoD MS B or contract award. They



We may need to be innovative and think “outside the box” about business arrangements and contract structures. In these cases, the structure and processes in DoDI 5000.02 may be highly tailored or even abandoned.

did this so successfully that the EMD phase of the program was canceled in favor of a commercial approach that limits the DoD's activities to compliance testing of the MGUE devices and integration of those devices into pilot platform programs.

The final example I'll cite is the Marine Corps decision to defer the program to acquire a new design amphibious assault vehicle in favor of a near-term option to acquire a modified non-developmental item (NDI). The Marine Corps concluded, I believe correctly, that the technology was not mature enough to support the Corps' desired performance levels and that a new product would be unaffordable. As a result, the Marine Corps opted to first evaluate and then pursue a competitively selected near-NDI alternative. This is more military than commercial off-the-shelf, but the principle remains the same. This program does include some modest DoD-funded development to, for example, integrate U.S. communications equipment and test for compliance with requirements, but it is a highly tailored program designed to move to production as quickly as possible and with minimal DoD costs.

The Common Thread

What all these examples have in common is the DoD's recognition that an alternative path—outside the normal DoDI 5000.02 route—was available and made sense from both a business and an operational perspective. Once such an opportunity is recognized, a more commercial approach can be adopted, but this requires some novel thinking and open-mindedness on the part of the DoD acquisition team. We cannot “go commercial” for all of our acquisitions or even most of our weapons systems. The normal process works best for the standard low-volume, highly specialized, cutting-edge and uniquely military products that populate the DoD inventory. The business case simply isn't there for industry to develop and offer these types of products without DoD development funding. In all standard DoD acquisitions, however, we need to proactively look for ways to embed or insert the most current commercial technologies. Where commercial approaches are justified, we need to spot and capitalize on the opportunity. &